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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,634	02/19/2004	Yoshiaki Kato	N9450.0065/P065 B	1894
24998	7590	12/29/2004	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP			SOUW, BERNARD E	
2101 L Street, NW			ART UNIT	
Washington, DC 20037			PAPER NUMBER	
			2881	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/780,634	<b>Applicant(s)</b> KATO, YOSHIAKI	
	<b>Examiner</b> Bernard E Souw	<b>Art Unit</b> 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Amendment*

1. The Amendment filed 11/24/2004 has been entered.

The specification has been changed.

Claim 18 has been amended.

Claims 1-17 have been previously cancelled.

Claims 18-30 are pending in this Office Action.

### **35 USC § 112 Rejection Withdrawn**

2. Claim 18 having been amended according to Examiner's suggestion, its previous rejection under 35 USC § 112/¶.2 is now withdrawn.

## Double Patenting

### **Statutory Type Double Patenting**

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claim 18 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

4. Claim 19 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 3 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

5. Claim 20 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 5 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

6. Claim 22 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 7 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

7. Claim 23 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 8 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

8. Claim 25 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 9 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

9. Claim 26 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 22 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

10. Claim 27 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 23 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

11. Claim 28 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 24 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

12. Claim 29 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 25 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

13. Claim 30 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 26 of prior U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued. This is a double patenting rejection.

### ***Non-Statutory Type Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

***Obviousness Type Double Patenting***

14. Claims 21 and 24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 5 of U.S. Application No. 10/239,764 which has been allowed 06/30/2004 but not yet been issued, in view of Kelley (USPAT 5,451,782), hereinafter Kelley'782.

Claim 5 of the allowed US Application No. 10/239,764 shows all the limitations of claims 21 and 24, except the recitation that the frequency and voltage of the supplementary AC voltage in the third step of claim 5 (which is identical to claim 20 of the present application) are fixed and the main frequency voltage is swept from high voltage to low voltage (present claim 21), or from low voltage to high voltage (present claim 24). These limitations are rendered obvious by Kelley, as recited in Col.4/ll.52-55 and in the Abstract/ll.20-25, whereby the phrase "*at least one parameter of the trapping field*" covers the main frequency voltage. The recitation of a specific sweep from high voltage to low voltage (present claim 21), and from low frequency to high frequency (present claim 24) are both inherent in Kelley'782, since such a sweep or scan *must* be conducted from one end to the other end of the scan range, and Kelley does not specify any specific scan or sweep direction, which also means it is not critical and therefore can be performed in either one of the two possible scan directions.

### ***Final Rejection***

15. No new ground(s) of rejection is presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Response to Applicant's Arguments***

16. Applicant's arguments against the statutory double-patenting rejection of claim 18 based on Kato (USPAT # 6787767), hereinafter Kato'767, stating that the present "*claim 18 recites a mass analyzing method which includes a third step of applying a supplementary AC voltage having a plurality of frequency components between the end cap electrodes, and scanning the main high frequency voltage*", whereas "*claim 1 of Kato '767 does not recite a third step that includes scanning the main high frequency voltage*", but "*instead, claim 1 of Kato '767 recites a third step that includes scanning the frequency components of the supplementary AC voltage*", is found unpersuasive, since

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Kato'767's claim 1 recites word-by-word "a fourth step of scanning said main high frequency voltage and ejecting ions from said mass analyzing unit and detecting thereof".

More specifically, claim 18 of the present application recites the step of "scanning the main high frequency voltage" **twice**, i.e., in the third step and in the fourth step: "a third step of applying a supplementary AC voltage having a plurality of frequency components between said end cap electrodes and scanning said main high frequency voltage, said supplementary AC voltage having a first frequency component with a voltage value (V1) at least high enough to eject ions in resonance and a second frequency component with a voltage value (V2) high enough to excite ions in resonance but not high enough to eject ions in resonance, a fourth step of scanning said main high frequency voltage and ejecting ions from said mass analyzing unit and detecting them". This is to be compared with Kato'767's claim 1, which recites, "a third step of applying a supplementary AC voltage having a plurality of frequency components between the end cap electrodes and scanning the frequency components of the supplementary AC voltage, and a fourth step of scanning the main high frequency voltage and ejecting ions from the mass analyzing unit and detecting thereof", which is essentially the same as in the present claim 18, since the additional limitation "said supplementary AC voltage having a first frequency component with a voltage value (V1) at least high enough to eject ions in resonance and a second frequency component with a voltage value (V2) high enough to excite ions in resonance but not high enough to eject ions in resonance" is inherent in claim 1 of Kato'767 by virtue of the specification.



Even if not under statutory double patenting rejection, claim 18 would still have been rejectable under non-statutory double patenting. However, because of the doubly recited limitation in the present claim, and the inherency of an additional limitation by virtue of specification, as recited above, the present claim 18 essentially recites exactly the same invention as what is claimed by claim 1 of Kato'767, despite slightly different claim language. As such, claim 18 stands rejected under statutory double patenting, as already applied in the previous Office Action. Consequently, claims 19, 20, 22 and 23-30 dependent thereof also stand rejected under statutory double patenting, which can not be overcome by filing a Terminal Disclaimer

***Relevant Prior Art(s)***

17. These prior arts made of record and not relied upon are considered pertinent to applicant's disclosure: (a) USPAT # 5,756,993, issued on 05/26/1998 to Yoshinari et al., (b) US-PGPUB # 2004/0061050, issued on 04/01/2004 to Kato, and (c) US-PGPUB # 2003/00085349, issued on 05/08/2003 to Kato, are found to claim the same invention as the present disclosure, and therefore could have been used for rejecting claim 18 of the present disclosure under 35 USC § 102(b), and under statutory double patenting rejection of claim 18 in reference to claim 1 of US-PGPUB # 2004/0061050 and US-PGPUB # 2003/00085349, respectively, for the same reasons (i.e., doubly recited step or limitation, and inherency by virtue of the specification), as applied above in reference to claim 1 of USPAT # 6787767.

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***Communications***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes  
December 15, 2004

  
JOHN R. LEE  
SUPERVISOR PATENT EXAMINER  
TECHNOLOGY CENTER 2000